# H.R. 2096

Y 4. B 22/1:103-126

H.R. 2096, Serial No. 103-126, 103-...

## HEARING

BEFORE THE

SUBCOMMITTEE ON INTERNATIONAL DEVELOPMENT, FINANCE, TRADE AND MONETARY POLICY

OF THE

# COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

MARCH 15, 1994

Printed for the use of the Committee on Banking, Finance and Urban Affairs

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#### H.R. 2096

#### TUESDAY, MARCH 15, 1994

House of Representatives,
Subcommittee on International Development,
Finance, Trade and Monetary Policy,
Committee on Banking, Finance and Urban Affairs,
Washington. DC.

The subcommittee met, pursuant to notice, at 3:07 p.m., in room 2128, Rayburn House Office Building, Hon. Barney Frank [chairman of the subcommittee] presiding.

Present: Chairman Frank, Representatives Kennedy, Orton,

Watt, and Bereuter.

Chairman FRANK. This hearing of the Subcommittee on International Development, Finance, Trade and Monetary Policy will come to order. We are here today to hear testimony on legislation sponsored by a member of the subcommittee, Mr. Kennedy, who has been particularly concerned about the policy regarding environ-

mental exports.

Clearly, when we are shifting the way we spend a lot of our resources, when military spending has begun to decrease, when patterns of investment are shifting, we are interested on two levels in increasing environmental exports: one, as a benefit to the economy of the United States; two, as something that is good for both the economy and the environment of the people to whom we would be exporting them.

This is a classic case, I think, of doing well at both ends: by selling products which are good for us economically and which we also benefit from when they lead to environmental improvement in

other nations and which help them as well.

I, myself, have become particularly aware of the need for this because of long conversations I have had with Mr. Brody and others about a proposal by the Raytheon Corp. to take advantage of Brazil's need to purchase significant environmental equipment. That is one that has been not moving as well as I would like to see, and I think it is important—not just for the Export-Import Bank but for the U.S. government in general—to focus more than it has previously on the need for coordinated policies that promote these resources.

The Export-Import Bank is obviously an important place in which to focus these efforts, and so I welcome our colleagues and

look forward to hearing the testimony.

Chairman FRANK. Mr. Bereuter, do you have an opening statement?

Mr. BEREUTER. I do, Mr. Chairman.

Again, as you said, today we focus on the Export-Import Bank and the environment, this time with a focus on export markets for

environmental goods and services.

This is an arena where the United States has been the preeminent technical innovator, largely because of our sensitivity to environmental impacts in our own domestic economy and society and because of our generally superior technology base. As the world begins to focus on more environmentally beneficial industrial processes, energy technologies, and other products and services, the export potential for the United States is growing.

The U.S. government clearly does need to give more focused attention to export promotion. The Trade Promotion Coordinating Committee process, which was mandated by Congress, is charged with the responsibility for assuring steps toward a coordinated interagency strategy. The Congress will be waiting to see the

results.

One aspect of the export policy is an export finance strategy that takes advantage of the U.S. competitive edge in environmental goods and services and orients it to the international as well as the domestic marketplace. It is not clear to me that we need anything as dramatic as a separate window or earmarked funds at Ex-Im Bank, such as is proposed in H.R. 2096, to take advantage of those opportunities, but I am willing to examine that concept, and we do need to ensure that Ex-Im is well-positioned to supply funds for these sorts of exports when finance cannot be obtained from the private market.

With limited public resources, the official export finance business worldwide seems to be evolving in the direction of less sovereign credits and more project-based finance. Many of the export deals in the energy and power sector fit this description. As environmental energy and efficiency considerations begin to shape the new, large investments in this sector in developing countries, the United States needs to be ready with export finance capability so that U.S. firms can win this business and American workers can have jobs.

I look forward to the testimony of the witnesses today to help us to consider the legislation that is introduced by Congressman Ken-

nedy and to explore the subject generally.

Chairman Frank. Now we will hear from the sponsor of this legislation, who has been one of the leaders in pushing not just this subcommittee but Congress into taking these actions. Mr. Kennedy.

# STATEMENT OF HON. JOSEPH P. KENNEDY II, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MASSACHUSETTS

Mr. KENNEDY. Thank you very much, Mr. Chairman.

First of all, Mr. Chairman, let me thank you very much for agreeing to hold this hearing today. I want to thank both you and Mr. Bereuter but particularly yourself because this subcommittee has a tremendous capability of impacting not only life here in the United States but life in other countries as well.

There is always a question, as you have spoken so articulately on the House floor, Mr. Chairman, with regard to the amount of money that we currently spend on our defense bill, particularly involving other nations. The reality is that, in many cases, the American public doesn't see any great benefit from the amount of money

of their taxes that we spend overseas.

I think this particular subcommittee is well placed to demonstrate in a very concrete way how using a few American dollars as incentives to help companies that have already gotten new, innovative, and creative technologies to export those technologies to countries overseas, and, in so doing, create very good jobs here for the American people.

And I want to commend you, Mr. Chairman, for the efforts that you have made on behalf of working people, both in your district and around the country, in demonstrating the real need for economic development in the third world. And Mr. Bereuter has also been a strong supporter of those kinds of policies in terms of not only his work here in the Congress but his work in the developing world before he came to the Congress. So I appreciate both of you taking the time to be here.

The legislation we have before us today is really pretty simple. It establishes a set-aside for about \$500 million of new money, which I want to emphasize to Mr. Brody so he won't look quite so

upset.

We are trying to give you some extra money so you can go out and assist companies such as the ones we are going to hear from this afternoon—Mr. Bryen and Mr. Hinrichs and Mr. Preston, in terms of their knowledge and understanding of the fact that there is a growing worldwide market that is going to be extremely competitive, that the United States is either going to take advantage

of or we are going to sit on the sidelines.

We saw President Clinton run very hard for the Presidency of the United States on the premise that the United States can, in fact, compete internationally and by going out and taking our best technology, our best workmanship, and our education to the international marketplace, that we, in fact, can win. And I think that there is no greater opportunity for us to demonstrate the kind of spirit that President Clinton showed in that campaign than through the Ex-Im Bank and export technologies regarding the environment.

This is a marketplace that is already, in many estimates, \$200 billion to \$300 billion. It is estimated to double in the next several years. We are going to either take these tremendously advanced companies, some 40,000 to 60,000 of them exist here in the United States, many times undercapitalized, many times without a broadbased knowledge or understanding of how they can export into all the various countries around the world, that are going to be—have a tremendous demand for environmental technologies.

I started several companies before I came to the Congress that, in fact, worked in countries such as Costa Rica and Venezuela and Jamaica and others involving environmental technology. The only way that we ever heard of their interest was by virtue of the fact that my company, based on its oil revenues, had the ability to go down and investigate in each of those countries and determine

what their needs were.

Many companies just simply don't have the capital or the economic base to find that out. Mr. Brody, you run an organization that has the ability to provide the insurance, it has the ability to

provide the loans, it has the ability to provide the information that allows our companies to know and understand what that opportunity is. Now, you can tell us that you don't need the \$500 million,

that you have got plenty of money.

You would be the first person, I think, that I have heard in 8 years being a Congressman that told me you have got money-you have got more money than you know what to do with. But if you say that, I will be amazed, and we will have some answers for you. But, nevertheless, if you don't say that, then I would suggest that this is going to be-we are not-Barney and I are not going to sit back and try to have the Congress come back in and cut up your funds and have us do targets of opportunities that take away from your existing flexibility. We are trying to provide you with additional funding and give you a reason and a rationale to put environmental technologies on the forefront of the kind of export capability that this country has and take advantage of that capability.

If we went and spent millions of dollars and had all sorts of gnashing of teeth and bloody backs over the fact that we need an industrial policy in America, after all those fights, after all those academic contracts, after all those studies, after getting Wall Street and everybody involved in what our export policy and what our domestic policy ought to be with regards to MITI in Japan or Bundesbank in Germany, we could conclude that we ought to put money into environmental technologies. That is where the growing marketplace is. That is where the jobs are going to be. That is where the ability to make money and take advantage of the assets that America has.

So I hope very much, Mr. Brody, that my remarks have turned you around, and you are now going to be a major advocate of H.R. 2096.

Just 1 additional brief minute. Let me summarize very quickly

what is contained in the bill.

The Export Enforcement Act of 1992 established environmental policy and procedures for the Ex-Im Bank. Specifically, the Bank is required to "take into account the potential beneficial and adverse environmental effects of goods and services," involving projects with long-term support of \$10 million or more.

This bill would do the following: It would require the Ex-Im Bank to extend this criterion to medium-term projects of \$7 million or more. This would broaden the number of Ex-Im projects that

must be examined for the impact on the environment.

Second, it would define environmental exports as including items that encourage environmentally sustainable development, promote efficient use of resources, and promote energy efficiency. The existing statute is extremely vague.

And, third and finally, it would create a fund of \$500 million for

the export of environmental goods and services.

Mr. Frank, I want to thank you very much for your willingness to have this hearing, and I look forward to working with you to get the bill passed.

Thank you very much.

[The prepared statement of Mr. Kennedy can be found in the appendix.]

Chairman Frank. Thank you. And we will now hear from our panel which consists of Chairman Brody of the Export-Import Bank; Dr. Stephen Bryen, President of the Lean Power Corp.; Thomas Hinrichs, Vice President of the Magma Power Co.; and John Preston, Director of Technology Development at M.I.T.

Mr. Brody, we will begin with you.

#### STATEMENT OF KENNETH D. BRODY, CHAIRMAN, THE EXPORT-IMPORT BANK OF THE UNITED STATES

Mr. BRODY. Mr. Chairman, I know that I am not supposed to thank the chairman for the opportunity to appear, but I assume that I am allowed to thank a member of the subcommittee for his work in the area of environmental exports and for keeping us honest as we are going about, hopefully doing the job that both he and we agreed should be done. So, thank you, Congressman Kennedy, for your great interest and for spurring us on and keeping us honest.

When we met last year in your office, I had already concluded but was certainly buoyed on by your views that Ex-Im Bank needed to do a lot more in the area of environmental exports.

Since that time, you and your staff have been keeping track of our progress and had us join you and various companies on a trip to Mexico about 6 weeks ago, which I think will end up proving

quite, quite beneficial.

Mr. KENNEDY. If I might just say again, thank you, as I have privately, for the assistance of Robin Carnahan, who did an excellent job in assisting many of the companies on that trip. And we appreciate the interest that the Ex-Im Bank showed on that trip. And I hope we can create some jobs out of it as well. Thank you.

Mr. Brody. Let me start by making it absolutely clear that we believe we have an important mission in helping the private sector increase significantly the export of environmental goods. We have already started work on this in a very significant way. Although we have made some progress. I believe there is much greater progress in the cards to be made.

As we examined the problem and how we could effect a change in Ex-Im Bank policy, we concluded three things. First, many exporters were small companies who need the kind of treatment that small companies generally need and that Ex-Im needs to able to provide for small companies, including environmental exporters.

Second, we concluded that significantly more outreach and education was required for environmental exporters so that they could better understand how they could benefit from using Ex-Im Bank.

Finally, we concluded that there were specific kinds of financial engineering that Ex-Im could go about doing that could turn not very creditworthy projects into creditworthy projects, which would enable Ex-Im to provide the support; and therefore allow exports of environmental goods to occur which would not have occurred before.

In the process of outreach and education, I personally have spoken with groups of exporters at individual companies across the country in Seattle, in Chicago, in Boston, in New York, and in

Washington, DC.

In connection with our upcoming annual conference, for the first time we are setting aside a half a day of education strictly for envi-

ronmental exporters.

On the small business front we have a lot in the works, much of which is applicable to environmental exporters, since many of these companies are small businesses. We are in the process of making significant improvements to our pre-export working capital program. In addition, we are introducing an insurance product for up to 5 years that will enable small companies to use us in a much easier fashion.

In terms of the educational outreach throughout the country and satisfying the needs of those small companies that cannot market and visit in foreign countries because costs are too prohibitive, the Clinton Administration has established through its new export strategy, the export assistance centers. Three of these centers are already open, and I think we shall see over the coming years many, many more export assistance centers opening around the country.

In addition, as part of the Administration's new export strategy, we have introduced a tied-aid response: that is, matching the very long-term, very low interest rate loans of our foreign competitors.

This will prove beneficial to environmental exporters.

In addition, on the larger side, we are in the process of putting together a project finance group which will take Ex-Im from being a passive last in supplying finance to large projects which are dependent upon project finance to an aggressive first in promoting of American exports. This should prove beneficial to environmental exporters.

In particular, with respect to financial engineering, we have a team—Robin Carnahan is part of that team—right now in Mexico where we are trying to work with the Mexican Government in solving the problem of how we do environmental exports and support environmental exports when the buyers are municipalities that are

not all that creditworthy.

I think we have some pretty high hopes of solving that problem and thereby opening the door to tens and tens and tens of millions—perhaps hundreds of millions—of environmental exports into Mexico that would not have otherwise been able to be supported by the Bank.

A quick look at results of environmental exports. In 1993, approximately \$400 million of environmental exports was supported by Ex-Im Bank. In fiscal 1994, we are already at that level this

vear.

Going to the specifics of H.R. 2096, I think what we should say and without being too repetitious, we are in harmony with the intentions of the bill; however, we have some disagreement with respect to achieving the objectives.

In general, we believe that set-asides as a rule, are unproductive and inefficient, particularly because we are a demand-driven insti-

tution that needs to have flexibility.

You can be sure that if we believed that we needed the money to support this critical sector we would be knocking on your door. The issue here, in our view, is not additional money, but outreach, education, and intelligent financing programs that have a special emphasis and financial engineering.

My final comment on H.R. 2096 is on the lowering of a \$10 million threshold in our statutory environmental language to a \$7 million threshold and including medium- and long-term transactions.

lion threshold and including medium- and long-term transactions. The problem with doing that is it would affect a substantial amount of our financings. It would cause delays and tend to make us less competitive in highly competitive markets. The legislation would affect over \$3.5 billion of exports, and because we are talking about a smaller size transaction, would run a significant risk of being contrary to the goal of assisting small- and medium-sized businesses.

[The prepared statement of Mr. Brody can be found in the

appendix.]

Chairman Frank. Thank you. Mr. Bryen.

# STATEMENT OF STEPHEN D. BRYEN, PRESIDENT, LEAN POWER CORP.

Mr. BRYEN. Thank you very much, Mr. Chairman. I have a formal statement—

Chairman Frank. Without objection, it will be inserted.

Mr. BRYEN. We are a small company that produces control systems for automobiles and trucks. Basically, what we do is retrofit

vehicles that do not have catalytic converters.

Much of the world today, most cars and trucks, have no environmental controls. And in cities like Mexico City, which you are familiar with, the ozone levels are very high, primarily due to automobiles, and we have been working in Mexico, in India, in Poland, and some of the other areas that need this kind of remedial

technology.

I want to congratulate Mr. Kennedy for the subcommittee's interest in setting aside funds for environmental projects, environmental technology, and particularly Chairman Brody's comment about small business, I think, is very apropos. We are a small business, and there are thousands like us that have appropriate technology that can help us ameliorate the environmental situation in many countries, including our own, and the more opportunity we have to operate, the more partnership we have with government, the better our chances.

You can't really sell environmental goods and technology abroad without being able to show the support of our own government and to show it at many levels. It is too linked in the minds of our counterparts abroad. What the U.S. programs are, how the U.S. programs work, whether the U.S. Government supports and backs it, is an important part of whether or not you are going to have—we

are going to have a chance to export. It is that simple.

If you are on your own, particularly if you are a small company,

your chances are slim.

So I think that the more the government and private sector work closely together on this—and Chairman Brody has spoken about that now I think very eloquently—the better off we are.

We have been very lucky. We benefited from AID programs. We just came back from an important trip to India where, I think, we will end up with a joint venture there. These are very beneficial.

The thing that we need most of all is some coordination among the various agencies, whether it is Ex-Im Bank or SBA or EPA, because it is a bit chaotic. And for a small company with limited resources, this can be formidable, as you know. So the more we do there, the better. And I think the more that funds are set aside and targets are set, which is what your legislation is really aimed at, the better off we will be.

So, again, without going any further than that, I will be glad to

respond to any questions later on.

Thank you very much, Mr. Chairman.

[The prepared statement of Mr. Bryen can be found in the appendix.]

Chairman FRANK. Thank you, Mr. Bryen. Mr. Hinrichs.

# STATEMENT OF THOMAS C. HINRICHS, VICE PRESIDENT, MAGMA POWER CO.

Mr. HINRICHS. My name is Thomas C. Hinrichs. I am vice president of the Magma Power Co. We are a geothermal exploration and development company, also involved in building generating plants and selling electricity.

I would like to point out to you that our geothermal resource is a good one from an export standpoint. We are not exporting the resource. We are basically exporting the technology that we have de-

veloped here in the United States and foreign countries.

There is a significant market and availability of geothermal resources overseas and a significant demand for that, and we do need some assistance from the Federal Government, particularly the Export-Import Bank.

Geothermal energy is one of the cleanest forms of electric generation on Earth and is a natural and highly effective tool in the effort to reduce greenhouse gases throughout the Earth. The more we export America's clean geothermal energy technology, the more im-

pact we will have on the fight against global warming.

United States companies such as mine have only begun to tap the enormous potential of geothermal energy around the globe. There is a chart in my submitted testimony that shows the potential for the development of some 78,000 megawatts throughout the world in geothermal energy. If this potential were achieved, we could prevent the release into the atmosphere of more than 575 million tons of carbon dioxide each year.

Increased export of geothermal energy technology means increased jobs for America. I see my own company also already increasing jobs because of our embarkment in the Philippines and

Indonesia.

Considering the significant megawatts of geothermal power potential in developing nations, the direct benefit to the U.S. economy of installing geothermal powerplants in developing countries could be in the tens of billions of dollars in the next 20 to 30 years

be in the tens of billions of dollars in the next 20 to 30 years.

For those nations fortunate enough to have indigenous, nonfloating geothermal resources, developing those resources can be a tremendous boost to the developing Nation's economy and to ours. By better utilizing its domestic renewable energy resources, a developing country can focus on exporting more of its own domestic resources to other nations and, in the process, strengthen its own economy.

As it increases its domestic electric power capacity, a developing nation can also improve the standard of living of its citizens. This economic growth and increased standard of living will, in turn, increase the demand for quality U.S. goods and services, helping boost our own economy.

In short, Mr. Chairman, we see international geothermal development as a win-win opportunity for the United States and for

many nations of the world.

Finally, what do we see as some of the needs that we have? There are hurdles to U.S. geothermal companies now working to export their clean energy technologies. Our technology is highly capital-intensive and involves significant project finance requirements, and I praise Export-Import Bank for beginning a process to assist that.

Magma Power is at present seeking to work with Export-Import Bank and others to acquire project financing and risk insurance for a significant geothermal development in the Philippines which is

under contract.

With regard to the Export-Import Bank, we are concerned that the Bank may have the resources financially, but they need to increase their personnel resources also to be able to assist companies such as ourselves in the timing required to get project financing in

place.

We understand that the Bank has not been traditionally structured to deal with these kinds of projects, and these projects are generally more complex in nature, involve different levels of risk. This is why we very much welcome Chairman Brody's announcement that he intends to create within the Bank a special limited resource project finance group with particular focus on power projects.

However, we would urge the Congress and the Clinton Administration to ensure that Export-Import Bank is provided the appropriate resources in personnel to make this limited resource financ-

ing effort a truly effective one.

We find that when you are involved in overseas development there are timelines that are necessary to be met. Right now, Manila is in blackouts and needs to get these projects on line and

are asking us to move quickly.

Additionally, we believe that the subcommittee and the Export-Import Bank should consider lowering or eliminating the \$50 million floor that the Bank has set as the minimum U.S. export value necessary for the bank to consider project finance. While those infrastructure projects in developing nations are large enough to meet this requirement, renewable energy development often involves projects of smaller magnitudes, particularly if a developing nation is in the beginning stages of developing its renewable resource.

If we are to do all that we can to encourage renewable energy developments around the world, we strongly recommend that the Bank be encouraged to finance renewable energy projects that involve less than \$50 million in U.S. export value. Even a small renewable plant can eliminate millions of tons of pollutants from the

atmosphere over the life of that plant.

Mr. Chairman, I want to thank you and the members of the sub-committee for your leadership in this important issue, and also Congressman Kennedy for proposing his legislation, H.R. 2096. We welcome any initiative that seeks to increase support for U.S. environmental exports, and we look forward to working with Congressman Kennedy, with the members of the subcommittee on this and other legislative initiatives designed to accomplish this important public policy goal.

More American jobs, a better balance of trade, and a cleaner world environment will be extremely worthwhile results of our ef-

forts. Thank you very much.

[The prepared statement of Mr. Hinrichs can be found in the

appendix.]

Chairman FRANK. Thank you. You did appear to elicit some agreement with Mr. Brody when you talked about the need for personnel. Mr. Preston.

# STATEMENT OF JOHN T. PRESTON, DIRECTOR OF TECHNOLOGY DEVELOPMENT, M.I.T.

Mr. Preston. Thank you very much, Mr. Chairman.

First, I handle the technology transfer for M.I.T., which is a university in Massachusetts. Roughly, what it translates into is we handle the one or two inventions a day generated by the staff at M.I.T. We find about—

Chairman Frank. Excuse me. This is not about M.I.T. Let's get

to the bill, OK?

Mr. PRESTON. I was going to take less than 5 minutes, Mr. Chairman, but I will jump right into it. I wanted to create a little bit of perspective on this because I thought it would be important to have the background, but if you want me to jump right into it, let me just give one or two points on background.

One is that I personally have founded or assisted in founding two companies in the environmental area that were the number one and number two performers on the stock market last year for all of the environmental companies. So I have a background that re-

lates to commercializing environmental technologies.

And I also have a background at M.I.T. related to the creation of jobs and wealth in this country through the spinoff of technology; the market capitalization of the 80 companies that I have helped start, wearing an M.I.T. hat, is about \$3 billion and growing rapidly.

I want to first applaud Mr. Kennedy for what he wants to do here. There is an enormous need to stimulate U.S. industry to take

over environmental business opportunities.

I also wanted to applaud Mr. Kennedy and Mr. Brody for the effort that they made in going to Mexico, because wearing the hat now as a director of a couple of the environmental companies that accompanied you, let me just put it this way. What we can do in life is a function of three things: How hard we work, how smart we work, and how much leverage we have on the work that we do. And you guys, by accompanying those companies to Mexico, increased their leverage enormously.

Let me talk about the opportunity. The opportunity has been grossly underestimated, in my opinion. The environmental industry

is every bit as important as the auto industry, long term, and other industries that we care passionately about. If you think about how much effort would go into creating a new order for one of our domestic airplane manufacturers, we are talking about something of equal or greater magnitude.

The environmental industry is 3 percent of our gross national product and growing rapidly. It is grossly underestimated because no one measures it accurately. We don't have standard industry codes for the environmental field where we have them for virtually

every other industry.

Mr. Bereuter's opening comments were right on target; namely, the United States has the best solutions. Those best solutions have been prompted by tight regulations, and they have been prompted by us having the best technology in the world and developing it successfully. United States companies, however, don't think of ex-

porting early enough and aggressively enough.

I saw a study done by a friend of mine at M.I.T. many years ago comparing United States startup companies with Swedish startup companies. What he found was that a typical Swedish company with under 20 employees had 90 percent of their business as export business, whereas a typical United States company with under 20 employees had zero exports.

Now, the reason, of course, is that our huge homogeneous domestic market is both a great asset and a great liability. It is a great asset in that it enables us to grow faster by capturing that market, but it is a liability in that it lulls us into being lazy relative to the

export opportunities.

The final point I would like to make is that creating incentives to stimulate export and environment is a good thing to do, and if the bill that is being proposed here is going to create those stimulants, it is a good thing to do.

Unfortunately, I don't know the detailed workings of the Ex-Im Bank well enough to ascertain that, but I do want to applaud what

Mr. Kennedy is proposing and the rationale behind it.

Thank you.

[The prepared statement of Mr. Preston can be found in the appendix.]

Chairman Frank, Thank you, Mr. Preston.

Before we proceed with comments, we will be joined by two of our colleagues; Mr. Orton, I know, will want to make a statement, and we will listen to his; and if Mr. Watt wants to say something, we will listen to his afterwards.

Mr. Orton.

Mr. ORTON. I would like to take this opportunity to commend you and my colleague, Mr. Kennedy, for the work you have done in this hearing and the bill. I think it is important to provide a stimulus and a method to assist those companies that could export environmentally beneficial technology, and I would ask unanimous consent to submit into the record statements by two businesses in my district, both of whom are interested in exporting technology, environmentally beneficial technology.

One is BOT [Battery Operated Technologies], which has developed a battery technology system for operating electric cars. The best Detroit has been able to do is a \$140,000 sale price. This com-

pany has been able to develop the technology that can convert and sell a brand new GEO Metro at less than \$15,000. It is tremendous technology. It is very clean and sensitive. This is a small business,

like that that Mr. Bryen was talking about.

Also, In Line Resource Technology—Interline, I mean—is a company in my district that has developed the technology for retaining used motor oil. For an investment of less than \$1 million and in a space less than one-quarter the size of this room, they can set up a refinery system that is completely enclosed, with no pollutants, nothing escaping from the system. That allows them to process over 6,000 barrels a day of used motor oil, which we are now dumping out somewhere into the earth into landfills and so forth. This both protects the environment as well as preserving very precious resources.

These are the kinds of activities that are going on, particularly with small businesses, throughout the entire United States; and if we were to adopt a mechanism similar to the one proposed by the gentleman from Massachusetts to encourage and support these kinds of exports, I think it would go a long way to not only improving our own economy, but also to providing very clean environ-

mental technology around the world.

And so I commend you, Mr. Chairman and Mr. Kennedy, for the

efforts and——

Chairman FRANK. Thank you and without objection, the statements the gentleman referred to will be put into the record.

Mr. Brody again has some interest in that and may want to talk

later about the names of those companies.

I am going to yield my 5 minutes to the sponsor of the bill, the gentleman from Massachusetts, and let him begin the questioning on his time.

Mr. KENNEDY. Thank you very much, Mr. Chairman.

Again, I want to thank all of our witnesses; and I know John Preston well enough to know that he wasn't about to launch into a great dissertation on M.I.T., but rather trying to ground us in some of the accomplishments that that particular Office of Technology has been responsible for, which I think give—and have given me certainly great impetus to establish this bill. So I just wanted to clarify that for the record, Mr. Chairman.

I also want to thank all of you for coming and testifying. I want

to direct a couple of questions to Mr. Brody to begin with.

As you are aware, OTA has done some studies with regard to our export capabilities with regard to environmental technologies. I understand that the—for instance, in 1992, the U.S. envirotech industry was one of the largest exports in the world. In relative terms, however, we exported only about 5 percent of our envirotech goods and services compared to 31 percent in Germany and 23 percent

in Japan.

Firms in Europe and Japan have a stronger export orientation than many United States companies. United States firms, especially smaller firms, as we have heard from several witnesses so far, have little export experience. Private export financing in the United States is scarce, and again, for smaller firms is especially scarce. Export financing in Japan and Europe is much more plentiful.

The U.S. government's help, according to the OTA study, is poorly coordinated and difficult to access, whereas with foreign governments, they are much more helpful, especially with concessionary financing. Ex-Im Bank's financing programs cover a much smaller share of exports than analogous programs in major competitor countries. OTA reports that in 1989, United States coverage was 2 percent; Japan's was 32 percent and France's was 21 percent. The primary reason is Ex-Im Bank's limited budget, according to—well, I am just telling you what the OTA study said. I figured you were going to disagree.

But I will tell you, when we were down with Robin in Mexico, we were cited time and time again that the Japanese Ex-Im Bank was, in fact, grabbing business that was available to the United States Ex-Im Bank, that the United States Ex-Im Bank simply wasn't even on the surface, but in fact United States companies were trying to use Japanese Ex-Im Bank financing; that, second, the negotiations that took place over the NAFTA by the United States in terms of getting environmental changes in Mexico were now being provided to German and Japanese firms using the Japanese

nese Ex-Im Bank.

So now you have got—what you have essentially is this bizarre circumstance where we go into a country, we have this long, drawn-out negotiation; and what happens is, we essentially open up a marketplace for German and Japanese firms to come in and take advantage of, despite the fact that—as Mr. Preston and these other fellows can tell you, as well as our colleague from Utah—we have the companies that have got the technology.

So something is broken here in the system. Something is not

working.

All right, you are agreeing with me. What is broken?

Mr. BRODY. Let me try to shed some light on some of these is-

sues, Congressman Kennedy.

On the topic of concessionary financing, tied aid, of our government working together and reaching out to small businesses throughout the country, when the Clinton Administration came into office we looked at these issues, and we agreed with you 100

percent

The President, after reviewing the work of the Trade Promotion Coordinating Committee, set forth a new export strategy which clearly addresses some of these issues. Some of these issues are currently being worked on, and some of were addressed immediately. One of the issues which was addressed is the combating of tied aid, concessionary financing, whereby a foreign competitor has a long-term, low-interest rate loan granted in return for the purchase of goods from that country. We are now combating that. That would be one point.

Mr. KENNEDY. I appreciate the tied aid debate. I am not talking

about the tied aid issue here.

Mr. BRODY. I am going to deal with all of your points.

Chairman FRANK. Time is not infinitely expandable, so why don't you get to the others?

Mr. Brody. I am trying to go as quickly as I can.

On the issue of financing availability from a foreign country, such as Japan, where Japan is giving concessionary financing, but

they are not tying that concessionary financing to the purchase of Japanese products, which you indicated was, in fact, happening, I am not sure we should look at that as a bad. We should look at

that as a good.

Mr. Kennedy. Ken, I appreciate that, but we are trying to get to—my 5 minutes are going to be up, so I am trying to cut to the quick here, which is to just say, you are running an organization that has the opportunity to provide people like Mr. Hinrichs, is it—I am sorry.

Mr. HINRICHS. Hinrichs.

Mr. KENNEDY. Mr. Hinrichs and Mr. Bryen and the companies that Mr. Preston is associated with, with financing that they des-

perately need.

Now, you can tell me that you are all set, that you have got the money that is necessary. What I am finding is that there are companies, many of which are having difficulty actually getting your Ex-Im financing and getting open access to these other market-places around the world.

You can tell me that the Clinton Administration has six other

programs to deal with it.

Mr. Brody. Let me just try to respond to your question.

First of all, it is no surprise that Germany exports more of a percentage of what they do than we do. Overall, Germany exports 38 percent of their GDP; we export 11 percent of GDP. Japan is higher than we are, as well.

The other point you made is that Germany and Japan are in there with their expertise helping their companies get buys. That

clearly exists in my view.

Mr. KENNEDY. We are trying to change that, Ken.

Mr. Brody. What?

Mr. KENNEDY. We are trying to get to how you change that.

Mr. BRODY. That particular matter is not a financing matter. That is a matter of expertise in drawing up regulations and needs to be countered by other means than finance.

Mr. KENNEDY. I am going to cut you off, Ken, and just see whether or not the other panelists agree with you, because I am going

to run out of time here.

I just want to see whether—Mr. Preston, is that your experience,

Mr. Preston. Yes, I think that corporate behavior, to a large degree, is driven by incentives; and if we make the financial incentives favorable enough, they will move to push export business and they will move to push environmental business. And so what we are talking about here is shifting the financial incentives, and I think it works.

Mr. KENNEDY. Exactly. Mr. Hinrichs.

Mr. HINRICHS. Our problem has not been a matter of funds not being available, but just getting to the loan processing on the time schedule that we needed; and we are looking to other options for that.

Mr. KENNEDY. That has been a problem with what organization?

Mr. HINRICHS. With the Export-Import Bank.

Mr. BRODY. That is a problem of the past and we are correcting it right now. I agree that it was a problem in the past and that

it should never have existed; however, it will not exist in the future.

Mr. KENNEDY. Mr. Bryen.

Mr. BRYEN. I agree. The incentives are very important.

Mr. KENNEDY. So, Ken, you see what is going to happen here is we are going to end this hearing because my 5 minutes is going to be up and we are going to go to other people, and we are going to end this hearing with you sort of feeling like you have gotten

through it and this thing is behind you.

And I know that you are trying your best to make this market-place work, given the kinds of limitations which you perceive that you work with; and what I think we are trying to say—even Mr. Bereuter as a Republican was saying, he is not necessarily endorsing this piece of legislation—but what we are all saying to you is we think that you have an opportunity to do something important, to not just accept the German and the Japanese position compared to the United States, but to assist our companies to try to get to a point where we are taking advantage of a major new international marketplace. We want you to be actively involved in helping these guys.

Mr. Brody. Congressman Kennedy, we have the same objectives. Let there be no doubt about that. But what you are proposing would not add any incentive that would make a difference in the

way that Mr. Preston would look at it.

Mr. KENNEDY. That is not exactly what Mr. Preston just seemed to be saying, nor was it accurate as to what he said in his opening testimony.

Would you say so, Mr. Preston?

Mr. Preston. Well, again, I am not an expert on the Ex-Im Bank function, so I have some questions as to how the money would be made available, but what I am saying that if you make available to U.S. companies more money, lower interest money, tax advantages, whatever it is, whatever the incentive is that hits their bottom line, you are going to move corporate behavior to focus on the opportunity; and if the opportunity is export and environmental technologies, you are going to move people in that direction, which I view as being a positive thing to do.

Mr. KENNEDY. Thank you, Mr. Chairman.

Chairman FRANK. Tax incentives—I mean, we should be very clear about what incentives we can deal with. We can deal only with financing terms and, even there, concessionary terms only in a limited number of cases. Tax and other things are just not within our jurisdiction.

Mr. Preston. I threw that out as an example, Mr. Chairman.

Chairman Frank. Mr. Bereuter.

Mr. BEREUTER. Thank you, Mr. Chairman.

Mr. Brody, on page 6 you have some discussion about your proposed creation of a limited recourse finance capacity within Ex-Im, and I would like to ask you a couple of questions on that issue, the

limited recourse financing proposal.

Mr. Hinrichs in his testimony suggests that Ex-Im Bank does not provide project financing; that is, the limited recourse financing, for projects with less than \$50 million in U.S. export value. One, is that the Bank's policy; and two, what is the justification if it is the

policy; three, do you have the staffing that you need now, the kind of staff pattern to accomplish this new focus on limited recourse finance; and maybe a fourth question, what is the competition doing

in that subject area?

Mr. Brody. In the area of limited recourse financing, we have a clear opportunity to go way ahead of the field because the competition is not in particularly good shape as it relates to today's and tomorrow's demand. Project finance is something that is bursting upon us today in a way that it has not in the past and is likely to very much more in the future, with a significant amount of it being energy related.

So I think most of the export credit agencies are more or less in the same boat. It is our belief that we will be out in front as a lead-

er within 3 month's period.

I can't possibly get into the reasons as to why the Bank did what it did in the past with respect to project finance. I think it is much more productive to talk about what we are starting to do.

Mr. Bereuter. I am attempting to focus on what your proposal

is; \$50 million, is that correct, is going to be the limitation? Mr. Brody. The \$50 million will not be a limitation.

Mr. Bereuter. What about the staffing pattern which you have

now to handle this new-

Mr. Brody. The reason that staffing tends to be a major and legitimate concern in project finance is that project finance is a highly specialized area which eats up hours because of the complexity of the transactions. What we are planning to do in staffing is twofold.

One, to give us the kind of jump-start we need, we are out recruiting right now for two experienced project-international project finance pros who will add an enormous amount of expertise to our capability. And then two, we have a specific plan that we are exploring right now which would enable us to put into operation this new finance area with our existing staff.

If this plan is not capable of being put forward, we would be back very quickly looking for additional staff. First, I want to try to do

it without additional staff and we have a plan to do that.

Mr. Bereuter. Mr. Brody, do you have to jump through all the same hoops on hiring practices that any executive branch agency would?

Mr. Brody. So far I have not found it to be jumping through

hoops, but being able to hire people in a sensible way.

Mr. BEREUTER. How quickly? How quickly?

Mr. Brody. It is my understanding that it takes approximately 6 weeks to go from start to finish in the hiring process, if you are

really pressing.

Mr. Bereuter. That is not too bad. I am surprised. As we are sitting here, as I was listening to this, it occurs to me that in many cases I think that our competitor countries, with respect to exports of environmental services and equipment or whatever, oftentimes are dealing with their own parastatals so they have got a direct interest in a capacity to move more quickly.

They don't have Glass-Steagall so therefore the financing oftentimes accompanies the industry that is attempting to export, they are less concerned with ethics, they are less concerned in having

the government choose to assist this company as opposed to another one, whereas we have an absolute problem with that. All of those things seem to stack up against us.

What are our competitive advantages?

Mr. Brody. Our competitive advantages are numerous. One, because of the fact that we have operated for a long period of time with the biggest and best capital markets in the world, we have a financial engineering expertise in this country that far surpasses any other.

Mr. Bereuter. I agree. I brought that up as part of my own opening statement. That is there. But what are our advantages as a government in trying to promote exports, other than the quality

of our products?

It looks like everything cuts against us compared to France or Germany or Japan. In terms of government assisting industry, government assisting exporters, everything seems to work against us.

Mr. Brody. I think a large part of that was true in the past, and I think we turned a very major corner when President Clinton announced this past September the new export promotion strategy. In the turning that corner, we have set up an advocacy operation that has other countries wondering, are we really allowed to do what

they have been doing for a long period of time.

And we started out doing it very, very successfully. We are studying some other potential negatives to see if we can turn them into positives. But, I think, in large we had a number of tools at our disposal that we did not use because we had the notion that we just should not. Now, we have awakened to the fact that because other governments help their companies compete in the global marketplace, it is incumbent upon our government to do the same, and I think we are doing it.

Mr. BEREUTER. Hope springs eternal and good luck. Thank you.

Chairman FRANK. Mr. Watt.

Mr. WATT. Thank you, Mr. Chairman.

I just had actually two questions. One, I am reading the bottom of page 7, Mr. Brody, of your prepared statement, and the top of page 8 and feeling a little confused. You say, while I fully agree with the intent of this legislation, I am not in favor of this specific provision for several reasons: Environmental reviews are an important part of Ex-Im's business, however, requiring an environmental review on all medium- as well as long-term transactions would cause delays in the processing time of transactions.

How could environmental reviews be an important part of what

you are doing if they are not required on these transactions?

Mr. BRODY. Just to be clear, we are switching from the topic of promoting environmental goods to the topic of protecting the environment in a foreign country.

Mr. WATT. That is actually why I came to this hearing as much as promoting the exports, I am concerned about the environmental

issues.

Mr. Brody. On this topic, after I was confirmed, one of the first things that we concluded is what the Ex-Im Bank had done in the past with respect to environmental reviews was not at all adequate and we had to make a completely new start. That, I think, is a clear major admission and gets us going in the right direction.

We have a mandate to promote exports of U.S. goods and services. If we introduced processes which, on each and every single transaction caused delays and expenses to the exporter that our foreign competitors did not have, we clearly would be introducing, in the language of Mr. Preston, disincentives, and we would be substantially hurting U.S. exporters.

Let's find enough to save, but that doesn't get you very far in en-

vironmental policy.

So what we have done is gotten together with major environmental organizations to assist them in understanding the basic nature of our work and then try to learn from them as well as from others within the Administration and outside the Administration so that we could come up with environmental policies and processes which on the one hand would enable us to achieve our basic mission of helping the private sector create jobs by financing exports that would not otherwise have been financed and at the same time keep us away from financing environmental bads. We are in the process of designing processes, which will keep us away from truly environmental bads on the one hand, but will not create a substantial negative impact on our support for U.S. exporters in general.

Mr. WATT. I think I hear you, Mr. Brody, but what I am hearing is you are saying you are going to have consultation with environmental groups, a general set of standards, but for any specific transaction that you are involved in, you are going to ignore those standards, and, I don't know how you can achieve an overall environmental objective without having-with respect to each project that you approve or consider—some environmental review. And, I

think those things are-

Mr. Brody. Mr. Watt-

Mr. WATT. More in conflict than you are saying they are in conflict is the point I am making.

Mr. BRODY. To start out with, the bulk of what we do is not

projects.

Mr. WATT. So you are going to have an environmental policy on things that you don't have as projects, but you are going to violate that policy with respect to any projects that you do?

Mr. Brody. I am not sure I quite follow that. Typically, if one

is talking about projects the way I think most of us think about projects, typically, the financing is long-term financing.

Typically, the transaction is going to be greater than \$10 million. As a matter of policy today, after we finish putting the new environmental processes into place which we are planning to, as a practical matter, it is highly, highly unlikely that any project that we are doing won't receive an environmental review.

But, for example, we would not want an environmental review on the export sale of \$1 million of catalytic converters to a purchaser

in Poland.

Mr. KENNEDY. Would the gentleman yield for a brief second?

Mr. WATT. Yes.

Mr. KENNEDY. You might want to ask him about the environmental review of the Czech nuclear reactor that he just approved the loan for, see exactly what kind of review.

Mr. WATT. I wasn't even going to go that far.

Chairman FRANK. That was the last hearing.

Mr. WATT. That was the last hearing, yes. I am not sure I understand what you are saying, Mr. Brody, but I guess I am missing

something.

Mr. BRODY. I am very interested in your having a full understanding of it, and I volunteer to come visit you in the quiet or noise of your office as it may be and sit down and have you understand it fully. I am very interested in people who are interested in it understanding it completely.

Mr. WATT. OK. Let me just as a followup to a prior hearing that we had, with the chairman's permission, you had testified at a prior hearing that your office was going to develop some criteria for

tied aid. How are we coming on that?

Mr. Brody. We are just about there. We have had extensive review within the government. We have had extensive review with exporters and we are now at the finishing up stages of having a full and final policy.

At the same time, we are going forward without having the full

and final policy.

Mr. WATT. We will get an opportunity to review those policies, those criteria, when you complete them?

Is that in our jurisdiction, Mr. Chairman?

Chairman FRANK. Yes. Since the legislation that governs the Export-Import Bank is in our jurisdiction and regulations can always be superseded by legislation, that would be wholly within our jurisdiction.

Mr. WATT. Thank you, Mr. Chairman.

Thank you, Mr. Brody.

Chairman FRANK. Mr. Brody, let me follow up on one question Mr. Bereuter asked. Did I understand you correctly to be saying that the \$50 million floor that was bothering Mr. Hinrichs will no longer be bothering Mr. Hinrichs because it won't exist anymore?

Mr. Brody. You understood it correctly, sir.

Chairman FRANK. Good. That is a constructive thing to have come out of here. I assume that was simply a requirement you inherited that you were able to abolish within your own authority.

Mr. Brody. I assume the reason it was there was because project finance is so time consuming and the Bank specialized in it. But,

if we have a process set up the way we do——

Chairman FRANK. We all agree it should go I gather, and that is fine. Particularly, when we are talking about the environmental area, we are talking not only about small companies, but small countries, I would think, and small buyers.

It is often going to be a small seller to a small buyer, so a \$50 million floor would be very difficult on either end, and I am

pleased, that seems to me concrete progress.

Let me ask Mr. Bryen, Mr. Hinrichs in particular, also Mr. Preston, are there other nonmonetary—I will get to the monetary in a second, but are there other nonmonetary things that you think could be done?

The speed of processing time you mentioned, Mr. Hinrichs, and Mr. Brody says he is working on that. Are there other things equivalent to the \$50 million floor that don't require appropriation or authorization that you think could be changed to the benefit of those

companies that have not traditionally benefitted from Ex-Im and which often have smaller transactions?

Mr. Hinrichs.

Mr. HINRICHS. One of the aspects that I understand in our financing is that what you would call construction financing is done by conventional financing, and then the Export-Import Bank steps in for the long-term financing, if it could be such that they could carry out that first step which has some risk associated.

Chairman Frank. Short term?

Mr. HINRICHS. Short-term construction financing would certainly be helpful.

Chairman Frank. Mr. Brody, is that a—

Mr. Brody. What we are doing in all the aspects of—and I don't think Mr. Hinrichs was in the meeting last week where I—

Chairman Frank. Mr. Brody, just answer the question.

Mr. Brody. What we are doing is we are adding an enormous amount of advantages to exporters which they do not now have. One of the advantages exporters would like to have and that we are not planning to add, is taking the risk during the construction period.

Chairman FRANK. What is the problem with that?

Mr. Brody. The problem with that is commercial banks are very well attuned to taking that risk. It is a special expertise. It is not a risk that is one that is, in my view, sensible for the Bank.

Chairman Frank. Is it greater risk than you usually take? If so,

how?

Mr. Brody. It is a different kind of risk. One that requires a great amount of specialized expertise to take, and interestingly, I was buttressed in this viewpoint, maybe even sent in this direction.

Chairman Frank. Buttressed because you got a construction loan

from someone else?

Mr. Brody. Even better than that, by a top executive at Bechtel, who was the former chairman of our Advisory Committee who, against his company's interests, said there is one area I would stay

clear of if I were at Ex-Im.

Chairman FRANK. I am not a great expert in this area. If you would like to develop that at any length in writing and submit it to us, I would be glad to then urge Mr. Brody to respond, and this is one area where I think we will try to help generate some conversation.

I don't know enough to judge it off the bat. Any others, Mr.

Bryen, Mr. Preston, any other?

Mr. BRYEN. Just on the staffing side, it would be nice to have a specific entry point for small business in Ex-Im and some of the

other agencies too. I think that would be very beneficial.

Mr. Preston. I was going to second that in the context of crispness of the interactions and understanding how to make things happen, there seems to be a slight communication problem, and I think there are lots of companies who aren't aware of the new enlightened attitude at the Ex-Im Bank.

Chairman Frank. I appreciate that, and outreach is something we have talked about. Mr. Brody has offered to come to various places. He has been up in Massachusetts and elsewhere to do that.

And I think we will try to continue to improve outreach.

Mr. Brody.

Mr. BRODY. A comment. In line with the reorganization that Ex-Im is taking right now, we are making small business a much more highlighted activity and part of our Business Development Group. We will have a small business entry point almost exactly as Mr. Bryen is describing.

Chairman FRANK. Let me just ask one other question, then Mr.

Kennedy has a follow-up, with regard to the amount of money.

I take it your position is that the money is not now a problem. That is, you haven't bumped up against a ceiling, but the question I guess we would have is—I am convinced you are making real progress in improving these things, although one consequence of improvement is that you are going to increase the claims on you. Once you do a better job of outreach, you get more small businesses involved, more people are coming. Do you envision a point when we might begin to bump up against a ceiling, for instance?

If we greatly increase involvement of smaller businesses, environmental businesses, you bring in the new business, what happens? Do we then get into a competition where the increase then could become a problem? Because I assume all of us hope it will

be a problem.

Mr. Brody. I don't see a problem today. I hope it will become a problem. I mean, some of the aspects of what we are doing, in particular, trying to be much more aggressive in higher risk markets, which cause more of a budget hit per dollar financed than the average market, are policies that will tend to cause greater use of us, and once that condition occurs, I will be the first to notify you.

Chairman Frank. Let me say, before I turn this over to Mr. Kennedy, I appreciate your telling us you are going to notify us. I understand your position that this is not now a ceiling we are starting to bump up against, but the first time a company calls any of us and says they were told that there wasn't enough money left, that

will obviously cause some concern here.

I hope we will be hearing from you long before we hear from that company. I agree, that is our goal, to get there.

Mr. Kennedy.

Mr. KENNEDY. Well, Mr. Chairman, actually you just asked the

question that I had intended to ask Mr. Brody myself.

But let me just review the situation as I understand where the problem exists. If you assume that you have a small environmental company such as the one—I can't remember if it was Bill Orton that described the little battery company, or if you have got someone that has a new way of dealing with let's say oil spill cleanups, or if you have got someone who has a new kind of catalytic converter of some type, now, he is operating and he is out in Detroit and he has got his little company out there trying to sell products around to the people that he thinks are interested in the United States.

How—what is your role? What is your view of the Ex-Im Bank's role in terms of assisting that fellow, one of, as I understand, 40,000 to 60,000, in terms of understanding what the opportunities are in Mexico, the opportunities in Japan, the opportunities in Nigeria, for marketing the product that he has?

I mean, what do you think you should be doing?

Mr. Brody. I think our role in that specifically is to do the best we can to have the right resources available from the government

to assist these exporters.

Specifically, in the Trade Promotion Coordinating Committee, we continue to do that very thing on a coordinated basis. The Department of Commerce's Foreign Commercial Service plays a prime role in this connection, because it acquires information in foreign countries and then transmits that information back to the United States where it is accessible through export assistance centers, which are being set up around the country.

That specialized task is not Ex-Im's role, but we view part of our role in helping ensure that the Trade Promotion Coordinating Com-

mittee is doing its job in getting that task accomplished.

Mr. Kennedy. All right. So when I was down in Mexico and I hear that the Japanese Ex-Im Bank is providing financing for environmental companies that are taking advantage of the NAFTA, that are taking advantage of a major multibillion dollar effort that is being made by both government and industry, that is providing financing for a range of not only foreign companies, but United States companies as well, you are saying that there are other—that we have just organized it differently here in America and there are other organizations that are responsible for that, and that I should just say, oh, well, that is OK, just because the United States Ex-Im Bank isn't on the map down here and isn't down here trying to—and I appreciate that Robin is back down there trying to—but hearing the sheer number of complaints and the sheer kind of volume of—even the United States officer at the embassy was saying that the Ex-Im Bank just isn't on the map down there.

That is what he was saying. So, what I guess I am kind of feeling is that you have got these individual entrepreneurs that are out there trying to make a go of it, and when I asked you about what you should be doing, you give this kind of broad brush to what the overall policy is, and it gets a little frustrating because it seems to me that a really aggressive stance taken by the Ex-Im Bank could provide a great deal more direct assistance to the small businesses

that are really needing it.

Mr. Brody. Congressman Kennedy, we are taking a very aggressive stance. The program of the Ex-Im Bank Mexico is over \$7 billion, so to say that we are not there is very, very far from the mark by whoever it was in the embassy, but more importantly, I applaud

the effort that you are undertaking here.

And I know because I am not supportive of the specifics of the bill, to you it may just be words. But, I clearly am very supportive of the effort, and I would like to give you a suggestion so that you will not just throw up your arms and think that—and go away frustrated, but be able to get your arms specifically around what the U.S. government is specifically doing to counter some of these things which I believe, as you do, need countering.

There is, as I mentioned, the Trade Promotion Coordinating Committee, which has specific tasks. And in addition to the overall committee, there is a specific part of the Trade Promotion Coordinating Committee that is set up to deal with all the aspects of pro-

moting environmental goods.

And I guess my suggestion is we are saying all that we are doing, and as I said, I believe that we are being highly aggressive within what Ex-Im can possibly do. And to help relieve some of the frustration that you have, and enable you to not be punching in the dark but be able to have specifics to deal with, I would suggest that there is a real place and real people to get this information from.

Mr. Kennedy. Well, I appreciate your wanting to help, and I very much appreciate the way, you know, trying to learn a little bit more about this coordinating—I did attend some press conference with regard to an effort made by the Department of Com-

merce and I appreciate that.

I don't believe that it is quite fair to suggest that this was just punching in the dark. You may not like where the punches are landing, but it wasn't in the dark.

Thank you, very much, Mr. Chairman.

Chairman Frank. The gentleman from Nebraska, Mr. Bereuter. Mr. Bereuter. Mr. Huffington has a few questions and I would ask unanimous consent that the questions and the responses be made a part of record.

Chairman Frank. Without objection, the questions will be made a part of the record, and the record will be left open for inclusion

of the responses. The hearing is adjourned.

[Whereupon, at 4:30 p.m., the hearing was adjourned.]



### APPENDIX

STATEMENT OF
KENNETH D. BRODY
PRESIDENT AND CHAIRMAN
EXPORT-IMPORT BANK OF THE UNITED STATES
BEFORE THE

SUBCOMMITTEE ON INTERNATIONAL DEVELOPMENT, FINANCE, TRADE, AND MONETARY POLICY
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS -- U.S. HOUSE OF REPRESENTATIVES

March 15, 1994

Mr. Chairman, Members of the Subcommittee:

Thank you, Mr. Chairman, for the opportunity to meet with you and the Subcommittee to discuss the environmental and small business activities of the Export-Import Bank of the United States ("Ex-Im Bank") and to comment on H.R. 2096, which amends the Bank's charter to promote environmentally beneficial exports, and authorizes an additional \$500 million to support environmental exports.

Let me state at the outset that I commend the Subcommittee for taking an interest in promoting exports in this area. Because of their great importance to our National Export Strategy, Ex-Im Bank is presently working on ways to enhance our program support. And we are making great progress.

#### Promoting Environmentally Beneficial Exports

I will begin my testimony by discussing Ex-Im Bank support of environmental exports. As you are well aware, the Export Enhancement Act of 1992 modified Ex-Im Bank's charter in two respects regarding the environment. It provided that Ex-Im Bank should encourage increased exports of environmentally beneficial goods and services.

There is no question that increasing the export of these products will help create more high-wage jobs for Americans at the same time that it helps improve the global environment. The size of this market is enormous. Current estimates show the worldwide market for environmental goods and services to be \$350-400 billion, and it is predicted to grow to \$600 billion by the end of the decade.

The developed world, with its more advanced regulatory requirements, will continue to be a very large and important market for U.S. exporters of environmental goods and services. However, the countries of the developing world, the emerging markets that Ex-Im Bank serves, may present the greatest prospect for long-term growth for the industry.

American companies have the technology and expertise to capture large segments of the world market for environmental goods

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and services. However, our companies already face strong international competition, particularly from Germany and Japan. The National Export Strategy announced by President Clinton last September reflects the Administration's commitment to helping companies compete in the international market and to increasing U.S. jobs through increased exports of all types of goods and services. Moreover, the unique opportunities presented by the environmental industry led the President to call for a specific strategy to promote environmental technology exports.

The Environmental Technologies Export Strategy developed by the Trade Promotion Coordinating Committee (TPCC) Environmental Trade Working Group was released in November 1993 and identifies key market trends and opportunities for environmental exporters. It recommends ways to better coordinate and focus U.S. Government export programs and resources and it recommends creating more partnerships between government and the environmental industry.

As you know, our primary mission is to increase American jobs by supporting the sale of U.S. products in situations where ordinary commercial financing is not available or where U.S. exporters face subsidized competition. In fiscal year 1993, Ex-Im Bank authorizations were a record \$15 billion. Of the \$15 billion, \$400 million was attributed to 19 environmentally beneficial projects such as: five water/sewage treatment facilities in Venezuela, the Maibarara geothermal power project in the Luzon

Province of the Philippines, and combined cycle power plants in Indonesia and Thailand.

So far in FY'94, we have provided support for more wastewater treatment facilities in Venezuela, biomass power generation at a Russian factory, gas condensate recycling in Uzbekistan, a wastewater treatment system in the Czech Republic, and another geothermal power project in the Philippines.

While Ex-Im Bank has supported exports of various pollution control equipment over the years, the fact is that, until recently, Ex-Im Bank has given no special attention or effort to exporting environmentally beneficial goods and services. However, we are changing. Our approach to increasing these exports is two fold. First, we plan to do more outreach to the environmental industry to make these businesses more aware of Ex-Im Bank services. And second, we are making a special effort to understand the unique needs of this industry. We are committed to being flexible and creative with our current programs. Where necessary, we may adapt our programs to meet their needs.

In 1993, Ex-Im Bank staff participated in numerous environmental meetings with industry representatives, bankers and environmental groups at trade fairs and conferences around the country and overseas. Another example of our outreach efforts is that this year we have been talking extensively with U.S. companies

and Mexican officials, both here and in Mexico, about how we might get more involved in financing environmental infrastructure projects in Mexico.

I am personally involved in these outreach efforts. I have met with environmental exporters in Boston, Seattle, Chicago, and Washington. I also have spoken at several major environmental conferences in New York and Washington. Recently, I spoke at a Trade Development Agency sponsored conference about our interest in supporting Mexican environmental infrastructure projects. In conjunction with our Annual Conference on April 21, we are planning a special program for environmental exporters. The program will focus on the growing international market for these U.S. goods and services, Ex-Im's interest in financing these export sales, and how companies can specifically access our programs.

We have learned from companies that many, particularly small and medium-sized environmental firms, do not know about Ex-Im Bank's services or how they work. It is also clear that many of these companies cannot afford the time and money needed to investigate far-away market potential, so they never reach the point of seeking our services. We hope that our outreach efforts, coupled with those outlined in the TPCC Environmental Technologies Export Strategy, will help bring more environmental projects to Ex-Im Bank for support.

For companies with immediate prospects for export sales that come to us for financing, we are trying to be especially responsive and flexible in meeting their needs. Clearly, the global shift towards democracy and privatization is leading to a shift in the nature of our business. There is a movement away from sovereign borrowing to municipal and state borrowing and structured project financing.

A good example of this can be seen in the financing of Mexican environmental infrastructure projects. Environmental improvements in wastewater treatment and solid and hazardous waste management are high priorities for the Government of Mexico. However, the Mexican government is committed to building these facilities without incurring extensive foreign debt. Instead, it plans to rely, as much as possible, on limited recourse project financing. In fact, this week we have a team in Mexico for extensive discussions with the government and bank officials about how we can get more highly involved in supporting these projects. We hope to have news to announce about that at our Annual Conference next month.

Because of the increased need for limited recourse finance expertise, we are proposing to create a new project finance group within Ex-Im Bank. The goal is to develop quickly the expertise requisite for supporting limited recourse projects, including environmental projects. We also are evaluating other means of

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helping environmental exporters, such as providing the maximum allowable financing terms and allowing certain local cost components to be included in environmental projects. We will keep the Subcommittee apprised of these efforts.

### Ex-Im Bank Views on H.R. 2096

As I have stated, Ex-Im Bank wants to increase our support for exports of more environmentally beneficial goods and services. We are particularly receptive to any such projects, or portions of projects, which come to us for financing. Ex-Im Bank's subsidy budget for FY'94 is \$1 billion with no caps on our authority. We hope to use \$300 million of that in Russia and the former Soviet Union. I am confident that with our current budget resources we can finance virtually all of the qualified environmental projects that request our Ex-Im Bank financing.

Our understanding of H.R. 2096 is that it would amend the Bank's charter by requiring that environmental procedures be applied to all medium and long-term transactions of \$7,000,000 or more. In addition, the bill would authorize an additional \$500 million of budget subsidy to be used solely for the support of environmental exports. While I fully agree with the intent of the legislation, I am not in favor of its specific provisions for several reasons. Environmental reviews are an important part of Ex-Im's business; however, requiring an environmental review on all

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medium as well as long-term transactions of \$7,000,000 or more would cause delays in the processing time of transactions and, therefore, could disadvantage U.S. exporters and jeopardize U.S. sales because of the sheer volume of medium-term deals. Furthermore, the Administration still has the entire issue of environmental procedures under review, and we do not want to prejudge the outcome of that review. Second, since we are a demand-driven agency, the allocation of funds for any particular sector would limit our flexibility to meet the needs of all U.S. exporters who use our programs and create U.S. jobs. The crucial element of our effectiveness is budget flexibility.

The third reason I do not believe the legislation is appropriate is that from what we have learned from environmental exporters the inability to obtain Ex-Im Bank financing has not been a barrier in preventing them from exporting. Instead, we have learned that many companies, particularly small and medium-sized firms, do not know about Ex-Im Bank's services or how to access our financing sources. This is why we are spending significantly more time and effort on outreach and making our programs more widely understood in the industry. I am confident that even if demand for our services increases significantly, we will be able to meet that demand within our current resources. Ex-Im Bank has never turned down an environmental export for lack of budget to provide financing.

### Small Business

Because many environmental companies are small and mediumsized, let me now turn to another extremely important export focus
of Ex-Im Bank: small business. As indicated by President Clinton's
National Export Strategy, small and medium-sized companies are
responsible for an increasingly large share of U.S. exports.
Moreover, the inability to secure export financing has been
described as a great inhibitor to the export success of these
companies. Thus, in conjunction with the President's National
Export Strategy and the Bank's desire to enhance the utility of
all our financing programs, particularly for small and medium-sized
companies, Ex-Im Bank has made several program modifications.
These modifications are the result of an in-depth internal review
by my staff and the TPCC.

First, we are in the process of making revisions to the Ex-Im's medium-term program. These changes will increase our support for smaller companies. In order to give users of Ex-Im Bank's medium-term guarantee and insurance program a more meaningful choice between the two programs, we are proposing to offer 100% cover under a conditional insurance policy or guarantee while continuing to offer the 100% unconditional guarantee option. Customers who want quick processing who can accept some conditionality may choose a conditional insurance product that covers all their risks and which we hope will permit securitization. On the other hand, customers who cannot accept any conditionality may still choose the unconditional guarantee. We hope this program enhancement will expedite the processing of more transactions under the insurance program, which require less staff time, and will free up staff who will then be better able to service other customers.

In addition, President Clinton has committed the United States, on a pilot program basis, to a new and more aggressive approach to combatting the tied-aid practices of our foreign competitors. Ex-Im Bank led this initiative, and we will be administering the pilot program. The new policy will focus on two major objectives. First, to create incentives for the rest of the world to stop employing tied aid as a trade weapon. We are sending a message that, even where foreign nations may be conforming to the technical OECD rules, we will not allow them to use tied aid to gain a trade advantage. Second, to provide support in response to competition in selected transactions that have the potential to maximize follow-on U.S. exports.

This proposed tied aid policy explicitly contemplates the use of tied aid for small companies and transactions. We propose to give added consideration to tied-aid requests from small companies, and to be supportive in matching transactions less than \$1 million. This represents a "first" in a new form of support for small and medium-sized companies.

### Ex-Im Traditional Small Business Program Changes

Finally, let me address changes and enhancements to our traditional small business programs, the Working Capital Guarantee and Insurance Programs.

In accordance, with the recommendations of the Trade Promotion Coordinating Committee ("TPCC") and in order to provide a more harmonized, effective and efficient service to small business exporters, Ex-Im's Working Capital Guarantee Program ("WCGP") is being harmonized with Small Business Administration's ("SBA") Export Revolving Line of Credit Program ("ERLOC").

To achieve harmonization, certain changes will have to be made to the WCGP and ERLOC. It will demand consistent coverage under both programs. Accordingly, SBA will be seeking Congressional approval to increase its program coverage from 85% to 90%. On the other hand, we will reduce coverage from 100% to 90%. The reasons for this reduction are twofold: increased delegated authority and harmonization. This harmonization is expected to be completed by October 1, 1994.

The harmonization of these programs will enable both agencies to be more user friendly, easier to access and administrate and allow for cross marketing of programs.

In addition, as a result of our in-depth internal program review, we are proposing that the most effective way to substantially increase authorizations under the WCGP is to expand the role of financial intermediaries and increase their use of delegated authority. Entities which are able to access the capital markets will be encouraged to participate in the program. With respect to delegated authority, qualified lenders will be given delegated authority of up to \$2 million per transaction based upon certain factors. As an incentive for lenders to use delegated authority and to compensate for the added expenses of administering these transactions, the most experienced lenders will receive a rebate of 25% on the facility fee for each transaction. We are in the midst of discussions with our customers regarding the proposed changes.

In connection with these changes, Ex-Im Bank also will encourage participation by the capital markets since they represent a potentially valuable source of funds for unfunded preliminary commitments underwritten by Ex-Im Bank. Furthermore, capital market participation will also increase the involvement of smaller banks in the WCGP by providing an outlet to those banks that wish to sell their working capital paper.

To facilitate the harmonization and increase use of the program, Ex-Im Bank will revise the Guarantee Agreement and other documentation related to the program. These revisions will be

implemented to make documentation more "user friendly" and to better define lender obligations.

In addition, Ex-Im also has been reviewing its Export Credit Insurance programs for small business. Presently, approximately three-fourths of all non-bank insureds are small businesses. the insurance policies available to U.S. exporters, two have been specifically designed to support small business exports, the Newto-Export and Umbrella policies. These policies assist those exporters with less export experience and lower annual shipments. They have higher levels of coverage and numerous enhancements to meet the special needs of the small business exporter. As a result of our internal review, Ex-Im Bank is proposing several changes to make these policies more effective in assisting small and mediumsized companies in their export needs. We are proposing the following: an increase in the overall export credit sales volume limit from \$2 million to \$3 million, and several measures to reduce the administrative costs of these policies. With these revisions, Eximbank is hoping to reduce the number of transactions that need to be submitted for review, and the number of credit reports that exporters have to purchase for these policies, which can be costly. These changes will increase the number of small businesses eligible to participate, simplify policy administration and reduce costs for the policyholders.

### Conclusion

The Administration is committed to strengthening the U.S. economy and our international competitiveness. Exports are a key to our economic growth-better jobs and standard of living. A crucial element in this equation is providing our support to promising sectors such as environmental goods and services.

STATEMENT OF DR. STEPHEN D. BRYEN, LEAN POWER CORPORATION¹
PREPARED FOR DELIVERY TO THE INTERNATIONAL DEVELOPMENT, FINANCE,
TRADE AND MONETARY POLICY SUBCOMMITTEE IN SUPPORT OF H.R. 2096

March 15, 1994

Our company, Lean Power Corporation, has developed and patented a unique environmental technology for cars, trucks and other spark combustion engines not equipped with sophisticated catalytic converters. We designed the system to be low in cost and easy to install, anticipating a large international market for the product. H.R. 2096 will facilitate our ability to successfully conclude business abroad by making it possible for us to export our products.

The market for environmental products outside the United States is expanding. A recent study of the motor vehicle pollution market ("Motor Vehicle Pollution Control: The Global Market" by Michael Ward) estimates the current market will grow from \$12.5 billion to \$29 billion by the year 2000. Today there are about 500 million automobiles and light trucks in the world, about half of them in the United States. U.S. cars and trucks today are equipped with sophisticated environmental controls, except for about 35 million that either lack them altogether or have only rudimentary systems. Outside the U.S. more than 150 million vehicles do not have environmental engine control systems. Such vehicles are a major source of air pollution. In addition, there are tens of millions of motor bikes, gasoline powered rickshaws and other three wheeled vehicles which churn out tens of millions of tons of hydrocarbons, carbon monoxide, oxides of nitrogen and particulates.

Part of the reason for growing concern about the environment is the obvious threat poisoned air poses to public health, and the impact that has on productivity and positive growth. A recent study in the U.S. has clearly linked high concentrations of small particulate matter, coming from cars and trucks, to premature death rates. Called the Harvard Six Cities Study, it found a 26% higher rate of premature death in the most versus the least polluted cities in which it tracked 8111 people for 14 to 16 years. A significant portion of small particles comes from auto and truck exhaust. When we take into account the significant progress made in the U.S. compared to other countries in curtailing the amount of air pollution coming from mobile and stationary sources, one can grasp how terribly high pollution levels impact the economy and well being of many countries where less environmental progress has been registered.

We know from first hand experience how serious the air pollution problem can be. We

<sup>&</sup>lt;sup>1</sup>Lean Power Corporation is based in Silver Spring, Maryland. Tel: (301) 588-2200; Fax: (301) 588-9271 and E-Mail at sb177@umail.umd.edu. In April the company will relocate to the University of Maryland 'Technology Advancement Program.'

tested our first system in Mexico City in February, 1992. A report written for the Audubon Society by Pete Hamill says: "On February 6, 1992, the Mexico City ozone level reached 342 points. It was 332 points on February 10 and an incredible 398 points on March 16. Factories were ordered to cut production 50 to 75 percent. Schools were closed. Citizens hid behind closed doors or wore masks."

The good news is that Mexico and India and many other countries in Eastern Europe, South America, and across Asia want to move quickly to clean up as much of the pollution as they can. They are looking to the Western industrialized countries and particularly to the United States, for help.

The proposed legislation, H.R. 2096 is important, not only because it will make it easier for American environmental firms to export, but because it is a signal that the U.S. government backs these export activities and gives them special priority.

Unlike standard commercial products, technology and services for environmental improvement must not only be accepted by consumers, but local governments need to step in with regulations that support environmental clean up. This is not always an easy task, particularly when times are tough -as they are, for example, in Eastern Europe. Support from the U.S., therefore, is welcomed because it lifts some of the political burden for key decision makers in other countries.

The legislation pending before the Subcommittee fits into a broad range of initiatives suggested by the administration aimed at promoting exports of environmental goods, technology and services. Recently Lean Power Corporation was able to demonstrate its emissions control system in India under a joint U.S.-Indian program called T.E.S.T. which stands for Trade in Environmental Services and Technology. The program, which is administered in the U.S. by the Agency for International Development and a counterpart organization called the Industrial Credit and Investment Corporation of India, and makes it possible for American companies to work in India and adapt U.S. technology to local needs and requirements. We are close to completing an important joint venture in India thanks to T.E.S.T. Programs such as T.E.S.T., the Asian Environmental Fund, and similar initiatives can kick off exciting business opportunities for American firms. H.R. 2096, if adopted, will help make it possible for many American companies, especially smaller firms, to stay the course and compete successfully in this constructive area of economic activity. We congratulate the Subcommittee on this initiative.

# Magma Power Company



Testimony of Thomas C. Hinrichs,
Vice President
Magma Power Company, Inc.

Before the House Banking Subcommittee on International Development, Finance,

Trade and Monetary Policy

March 15, 1994 2128 Rayburn House Office Bldg. 3:00 p.m. Testimony of Thomas C. Hinrichs, Vice President, Magma Power Company, Inc.

Before the House Banking Subcommittee on International Development, Finance, Trade and Monetary Policy

Mr. Chairman, Members of the Subcommittee, thank you.

My name is Thomas C. Hinrichs, and I am a Vice President of Magma Power Company, a geothermal energy development company based in San Diego. Our power plants in California and Nevada have at present a generating capacity of 240 megawatts -- enough to serve the needs of a quarter of a million Americans. More than 4 million barrels of oil per year would be necessary to generate an equivalent amount of electricity.

Magma Power was the pioneering company of geothermal energy in the U.S. with the early development of The Geysers in Northern California in the 1960s. Today, The Geysers stand as the world's largest geothermal operation.

As a U.S. renewable energy company eager to increase our export of clean energy technologies around the world, we want to thank you, Mr. Chairman, and the Members of this Subcommittee, for holding these important hearings on U.S. environmental exports.

As President Clinton said recently in his proposed FY95 Budget, "Geothermal energy may be one of the largest, most reliable and widespread renewable energy sources available." As one of the largest producers of geothermal power in the U.S., we at Magma Power know that this is true, and we are pleased and proud of our role in helping make America the world's leader in geothermal energy production. We agree with you, Mr. Chairman, and with President Clinton, that more U.S. environmental exports will mean more jobs for Americans, a healthier balance of trade, and a cleaner global environment.

At Magma Power, our particular environmental export is the technology and expertise needed to utilize clean, natural and renewable geothermal energy. By tapping the Earth's natural heat, geothermal companies generate electricity, provide direct heat for use in homes and buildings, fuel industrial processes such as greenhouse cultivation and aquaculture, and provide demand-side management through high-efficiency geothermal heat pumps.

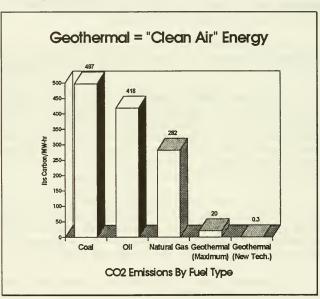
In discussing the export of geothermal energy technologies, I think it is important to note that, for those nations fortunate enough to have indigenous, non-polluting geothermal resources, developing those resources can be a tremendous boost to the developing nation's economy and to ours. By better utilizing its domestic renewable energy resources, a developing country can focus on exporting more of its own domestic resources to other nations and, in the process, strengthen its economy. As it increases its domestic electrical

power capacity, a developing nation can also increase the standard of living for its citizens. This economic growth and increased standard of living will in turn improve the demand for quality U.S. goods and services, helping to boost our economy.

In short, we see international geothermal development as a win-win opportunity for the U.S. and for many nations of the world.

Another principle reason why we and others in the U.S. geothermal industry are enthusiastic about the export potential of our product is the fact that geothermal energy provides one of the cleanest forms of electricity generation on Earth. The graph at right shows how geothermal energy stacks up against other fuels. Because geothermal power plants

release practically no air emissions. they greatly help to offset the release into the atmosphere of harmful pollutants such as sulfur dioxide. nitrous oxides and carbon dioxide. In fact, the U.S. Department of Energy estimates that geothermal power plants in the U.S. alone will effectively reduce the amount of carbon dioxide released into our air by 20 million tons this year.



Geothermal energy is not only clean, it is highly reliable. Geothermal power plants operate at a capacity factor that is one of the highest of any generation technology. This means that an installed megawatt of geothermal capacity will generate more kilowatt hours each year than virtually any other type of power plant.

Geothermal energy is a natural and highly effective tool in the effort to reduce greenhouse gas emissions. The more we export America's clean, geothermal energy technologies, the more we contribute to the fight against global warming.

U.S. companies such as Magma Power have only begun to tap the enormous potential of geothermal energy in the U.S. and around the globe. The U.S. Energy Information Administration, an independent unit of the Department of Energy, estimates that geothermal energy has the potential domestically to increase from today's 2,400 megawatts of production to 49,000 megawatts by the year 2010, if appropriate research and development strategies are pursued. Internationally, electricity production from geothermal energy could increase from its current 5,800 megawatts to about 78,000 megawatts.

If this potential were achieved, we could prevent the release into the atmosphere of more than 575 million tons of carbon dioxide each year.

To give the Subcommittee a more detailed picture of the global potential of geothermal energy, we have included a chart at the end of our testimony, labeled Attachment 1, illustrating the tremendous potential of geothermal power around the world.

The National Geothermal Association has estimated that this global potential will lead to approximately \$30 billion of investment in geothermal development outside of the U.S. in the next decade. Clearly, this shows that an excellent opportunity exists for the U.S. to capture a significant share of what is becoming a sizable global energy market.

From a market perspective, the time has never been better for the U.S. government and the U.S. geothermal industry to exert its considerable leadership in this area. The geothermal industry in the U.S. has matured and countries with geothermal resources are looking to U.S. companies to serve as partners to aid in their geothermal development.

In nation after nation, the demand for energy is growing -- and in some cases, it is skyrocketing. This increased demand is often accompanied by pressure on governments to utilize indigenous energy resources in order to curb costly energy imports. In those nations where geothermal resources exists with fossil fuel resources, geothermal development is favored since fossil fuels can be sold by those nations in the export markets.

One important result of these trends is that more and more governments are welcoming investment by private-sector power developers. For the U.S. geothermal industry, this has presented important new opportunities to export America's clean geothermal energy technologies to Pacific Rim nations such as the Philippines and Indonesia; to the countries of Central and South America; and to many others.

Clearly, increased export of geothermal energy technology means increased jobs for America. In a typical geothermal project conducted by a U.S. geothermal company in a developing nation, a significant portion of the total expenditures come back to the U.S. in the form of jobs or purchases of goods. In addition, these projects provide U.S. companies with the opportunity to expand and improve their "know how" and technological expertise that is so critical to expanding geothermal energy development.

Considering the estimated 78,000 megawatts of geothermal power potential in developing nations, the direct benefit to the U.S. economy of installing geothermal power plants in development countries could be in the tens of billions of dollars over the next 20-30 years.

However, Mr. Chairman, there are hurdles to U.S. geothermal companies now working to export their clean energy technologies.

Geothermal projects are highly capital intensive and involve significant project finance requirements. Often, these financing needs force geothermal companies to work with several institutions at the same time, which can present further challenges, due to the policies of many financial institutions aimed at limiting exposure in specific countries and industries.

Magma Power, for example, is at present seeking to work with the Export-Import Bank, the World Bank's International Finance Corporation, private banking institutions and other multilateral development institutions to acquire project financing and risk insurance for a significant geothermal development in Southeast Asia which is under contract. With regard to the Export-Import Bank, we are concerned that the Bank may not have the resources and personnel necessary to deal as efficiently as possible with limited recourse project finance applications such as ours.

Mr. Chairman, we anticipate the completion of the necessary effort will be accomplished to keep this project on track. However, we are presently completing negotiations on several new contracts that will be forthcoming and likely will require greater effort on the Bank's part. We are hopeful that the on-rush of these significant new opportunities can be accommodated by the Bank.

The risk for a U.S. environmental company such as Magma Power is that unless this financing can be processed prior to the deadlines stipulated in the contract, the opportunity for U.S. involvement in this project may be lost.

We understand that the Bank has traditionally not been structured to deal with these kinds of projects and that these projects are generally more complex in nature and involve different levels of risk. That is why we very much welcomed Chairman Brody's recent

announcement that he intends to create within the Bank a special limited-recourse project finance group with particular focus on power projects.

We would urge the Congress, and the Clinton Administration, to ensure that Exim is provided the appropriate resources necessary to make this limited recourse finance effort a truly effective one.

Additionally, we believe that the Subcommittee and the Export-Import Bank should consider lowering or eliminating the \$50 million "floor" that the Bank has set as the minimum U.S. export value necessary for the Bank to consider project finance. While most infrastructure projects in developing nations are large enough to meet this requirement, renewable energy development often involves projects of smaller magnitude -- particularly if a developing nation is in the beginning stages of utilizing its renewable resources.

If we are to do all that we can to encourage renewable energy development around the world, we strongly recommend that the Bank be encouraged to finance renewable energy projects that involve less than \$50 million in U.S. export value. Even a small renewable plant can eliminate millions of tons of pollutants from the atmosphere over the life of the plant.

We would also recommend that this Subcommittee, and the Congress in general, consider the following:

Recognize the unique and critical role that geothermal energy can play in helping lift developing countries from poverty by supplying large amounts of electrical power while maintaining environmental quality;
 Establish tax credits for investment in geothermal projects abroad and for sales of goods and services to geothermal projects in selected foreign countries;
 Establish guarantees for the prompt hard-currency repatriation of capital and dividends from geothermal projects abroad together with suitable insurance programs;
 Create financial mechanisms for the funding of the high risk stage of exploration and drilling of geothermal resources in selected foreign countries; and
 Institutionalize and expand activities of the U.S. Embassies and AID Missions incountry to help establish a hospitable legal and regulatory environment for private investment and to help identify investment and sales opportunities for the American geothermal industry.

Mr. Chairman, we want to thank you and the Members of the Subcommittee for your attention to this important issue. We also wish to praise the leadership of Congressman Kennedy for proposing his legislation, H.R. 2096. We welcome any initiative that seeks to increase support for U.S. environmental exports, and we look forward to working with Congressman Kennedy and with the Members of the Subcommittee on this and other legislative initiatives designed to accomplish this important public policy goal.

I would note, Mr. Chairman, that this Subcommittee has a strong reputation for working on a bipartisan basis on important issues such as this, and we believe this speaks highly of you, Mr. Chairman, and of Mr. Bereuter, and of your fine staffs. We also are aware of the good working relationship that exists between the Subcommittee's leadership and the Export-Import Bank. We would welcome the opportunity to continue this dialogue with you and with the Bank in the hope that, together, we can strengthen our export assistance programs and increase America's export of clean, environmentally beneficial technologies such as geothermal energy.

More American jobs, a better balance of trade, and a cleaner world environment will be the extremely worthwhile results of our efforts.

Thank you very much.

#### **TESTIMONY**

## HOUSE COMMITTEE ON BANKING, SUBCOMMITTEE FOR INTERNATIONAL DEVELOPMENT

March 15, 1994 John T. Preston

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to address you today. My name is John T. Preston and I direct technology development or commercialization for the Massachusetts Institute of Technology. In this capacity my office evaluates between one and two inventions each day, files nearly four patents per week and licenses two of these inventions to industry each week. To put this level of technology transfer in perspective, MIT's licenses and royalties are roughly one-third of that of the entire U.S. Government (DOE, DoD, NIH, NASA ...). The commercialization of technology has many benefits to society - the solution of problems ranging from cures for human health disorders to safe methods to solve environmental problems. Perhaps equally important, technology transfer makes U.S. products more competitive and creates jobs and wealth in this country. A recent study by the Association of University Technology Managers credited university technology license agreements with the creation of business units which employed nearly 300,000 people in this country last year. This activity was enabled through the passage of the Bayh-Dole bill (P. L. 96-517). This law gave universities the right to take title to Government funded inventions and license them to companies which manufacture licensed products in the U.S. As noted above, this law has had a very positive impact on the U.S. economy.

Outside MIT, I founded and assisted in founding two environmental companies, which last year represented the fastest and second fastest growing environmental stocks in the country, Molten Metal Technology and Energy BioSystems. I sit on three environmental company boards of directors as well as several advisory boards for the U.S. Government.

I want to make three simple points in this testimony. First, environmental technologies address one of the most crucial and fastest growing problems facing this planet. Second, U.S. companies do not recognize the importance of export as much as our foreign competitors, and third, government can influence industrial behavior through incentives.

The environmental industry currently represents about 3% of the country's gross national product - an industry greater than 100 billion dollars. The true size of the industry is probably much larger, because environmental technologies permeate nearly every industry. For example, if a chemical company re-engineers a process to reduce emissions of hazardous materials, that change might not be identified as environmental but rather as part of the chemical industry. In addition, environmental concerns impact the international competitiveness of U.S. industries. For example, U.S. companies that make simple products like door knobs are at an economic disadvantage because the plating solutions used in the process have tighter environmental regulations than many foreign competitors. Likewise a

U.S. manufacturer of semiconductors might face tighter regulation of the toxic gases used in the process than a foreign competitor. The U.S. has placed high value on the quality of life in this country even if it means a short term disadvantage for industry.

I believe that these regulations will ultimately benefit U.S. industry over our foreign competitors. The reason for my opinion is that these regulations are prompting us to invent solutions to the environmental problems - necessity is the mother of invention. These inventions will have a global demand. U.S. companies seem to be developing a significant lead over our foreign competitors in innovative environmental technologies. For example, during the last five years we have seen the emergence of technologies that for the first time show promise of solving some broad classes of nuclear waste problems. Also we have seen technologies that take hazardous wastes and convert them into valuable products, shifting the economics by thousands of dollars per ton and converting a liability into an asset. If, for example, we could take used tires and convert them into gasoline, it would be just as valuable to this country as finding a large new oil reservoir. Analogous situations are arising every day through the generation and adoption of new environmental technologies.

In order for us to capture the benefit of leading the world in environmental technologies, we must encourage the export of products that utilize these innovations. Unfortunately, U.S. companies are generally not as aggressive as our foreign counterparts in addressing export markets. Several years ago, I read a study companing Swedish start up companies to U.S. start ups. Amazingly, the Swedish companies typically had over 90% export business before they had reached 20 employees. By contrast, most of the U.S. companies had not yet exported any products at that size. America's large homogenous market is both an asset and a liability. This market enables young companies to grow rapidly by selling products into markets with common needs, culture and language. However, it also breeds laziness relative to foreign opportunities. The domestic market is so good that many companies fail to think internationally, which gives our foreign competitors time to adopt American innovation to their markets before us.

Finally, the Government can influence U.S. development of technology and our ability to export products which utilize these technologies through incentives. For example, lowering taxes for export sales of environmental products will stimulate such activity - creating U.S. jobs and wealth while helping to solve international problems. Similarly, changing the availability or cost of capital to finance such business will stimulate the same positive result. It should also be noted that negative incentives - such as taxes or penalties for business activities with negative environmental impact will stimulate the creation of solutions.

My recommendations to you are to continue a policy of gently pushing U.S. industry to innovate faster than our foreign competitors by instituting environmental regulations that lead the rest of the world, without creating such a hardship that these businesses are severely disadvantaged. Next, we must reward success by increasing the incentives for those companies that commercialize globally useful environmental technologies. If we succeed at dominating environmental businesses, the impact for the U.S. could be every bit as high as establishing worldwide dominance in huge markets like autos, computers, semiconductors or airplanes.

Thank you for the opportunity to share these views. I am pleased to respond to questions.

103D CONGRESS 1ST SESSION

# H.R. 2096

To amend the Export-Import Bank Act of 1945 to promote the export of goods and services that benefit the environment.

### IN THE HOUSE OF REPRESENTATIVES

May 12, 1993

Mr. KENNEDY (for himself and Mr. STUDDS) introduced the following bill; which was referred to the Committee on Banking, Finance and Urban Affairs

## A BILL

To amend the Export-Import Bank Act of 1945 to promote the export of goods and services that benefit the environment.

1	Be it enacted by the Senate and House of Representa-
2	$tives\ of\ the\ United\ States\ of\ America\ in\ Congress\ assembled,$
3	SECTION 1. PROMOTION OF EXPORTS OF ENVIRON-
4	MENTALLY BENEFICIAL GOODS AND SERV-
5	ICES.
6	Section 11 of the Export-Import Bank Act of 1945
7	(12 U.S.C. 635i-5) is amended—
8	(1) in subsection (a)(1)(A), by striking "long-
9	term support of \$10,000,000" and inserting
10	"medium- or long-term support of \$7,000,000"; and

1	(2) in subsection (b)—
2	(A) by inserting "(1)" after "(b)";
3	(B) by inserting "(such as by encouraging
4	environmentally sustainable development, pro-
5	moting efficient use of resources, and promot-
6	ing energy efficiency)" before the period at the
7	end of the 1st sentence; and
8	(C) by adding after and below the end the
9	following:
10	"(2) In addition to other funds available to support
11	the export of goods and services described in paragraph
12	(1), there are authorized to be appropriated to the Bank
13	not exceeding \$500,000,000 to support such exports.".

### Summary of H.R. 2096 Introduced by Rep. Joe Kennedy

The Export Enhancement Act of 1992 established environmental policy and procedures for the Export-Import Bank. Specifically, the Bank is required to "take into account the potential beneficial and adverse environmental effects of goods and services" involving projects with longterm support of \$10 million or more.

### Section 1

1) H.R. 2096 would require the Eximbank to extend this criterion to medium-term projects of \$7 million or more.

This would broaden the number of Eximbank projects that must be examined for their impact on the environment.

- 2) H.R. 2096 specifies that environmental exports include items that encourage environmentally sustainable development, promote efficient use of resources, and promote energy efficiency.
- 3) H.R. 2096 would create a fund of \$500 million for the export of environmental goods and services.













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